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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,217	06/04/2007	Paivi Maatta	0696-0246PUS1	6692
2292 7590 07/09/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER MCNALLY, DANIEL				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
07/09/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/587,217

Applicant(s)

MAATTA ET AL.

Examiner

DANIEL MCNALLY

Art Unit

1791

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3, 5-7, 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 7/25/2006

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species A, Figure 2, claims 1, 2, 4, 8, and 11-14 in the reply filed on 4/12/2010 is acknowledged. The traversal is on the ground(s) that there is no undue burden to search all species. This is not found persuasive because the species are drawn to mutually exclusive species and lack a common special technical feature as discussed in paragraph 4 of the Office action mailed 3/12/2010, and the distinct species require a different search and consideration.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 3, 5-7 and 9-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/12/2010.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2, 4, 8, and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the seal point" in line 2, "the sealing area" in line 5, and "the absorptive heat" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim. In each instance is it recommended replacing "the" with —a— or

--an--. Claims 2, 4, 8 and 11-14 depend from claim 1, require all the limitations of claim 1 and are rejected for the same reasons.

Claim 2 recites the limitation "the coating" in line 3. There is insufficient antecedent basis for this limitation in the claim. Additionally it is unclear if "a polymer-coating paper or board" is the same as the "fibre-based material" or if it is a different material, it is recommended reciting the fibre-based material is a polymer-coated paper or board. Additionally it is unclear if "a counter surface" is the same counter surface disclosed in claim 1, if it is it is recommended using "the" or "said" before "counter surface."

Claim 12 recites "a polymer-coating paper or board" and it is unclear if the material is the same as the "fibre-based material" or if it is a different material, it is recommended reciting the fibre-based material is a polymer-coated paper or board.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4, 8, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kammler [DE19516726A1, of record, previously cited] in view of Dries et al. [US2003/0003296, herein "Dries"].

Kammler discloses a method of sealing packaging material, specifically a fibre-based material (plastic coated paperboard) to a counter surface to be bonded to the

material by melting polymer (plastic coating) at the seal point. The method comprises directing a laser beam (15) through a fibre layer (paperboard 2u) of the material to a radiation absorbent sealing area (27) which the absorbed heat melting the plastic polyethylene coating and generating the sealing. Kammler suggests a pigment is present at the sealing area by disclosing the radiation absorption is improved by including a substance provided in the sealing area, but does not explicitly recite a "pigment." Kammler discloses laser welding equipment (43) but is silent as to the laser source being a diode or Nd:YAG laser.

Dries discloses a method of sealing packing material. The method comprises laser welding a packaging material comprising a polyolefin film, wherein a laser beam is irradiated through layers of packaging material to the polyolefin film where the laser beam is absorbed by an absorbent material that generates heat in the polyolefin film to bond the film to an adjacent layer (paragraphs 0004-0005). Dries discloses the polyolefin film can be bonded to itself or another film (paragraph 0007). Dries discloses the laser absorbing additive improves the absorption of the wavelength and discloses a known additive as carbon black that is incorporated into the polyolefin film (paragraph 0038, 0043). Dries discloses a known laser type for welding packaging films includes diode and Nd:YAG lasers (paragraph 0084).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Dries by incorporating a pigment into the plastic coating as taught by Dries in order to improve the absorption efficiency of the plastic coating, and to use a laser source that is a diode or Nd:YAG laser as taught by Dries in

order to ensure the laser beam is capable of sufficiently heating the polymer to form a weld.

With regard to claims 2 and 12-14, Kammler discloses a polymer coated paper board (2u) is welded to a counter surface (2v) by contacting the polymer coatings (13, 14) on each of the paperboards (Figure 6). Dries discloses the packaging material comprising the polymer outer layer can be bonded to itself, to an opposite surface of the material, or to another film (paragraph 0007).

With regard to claims 4, 8 and 11, Kammler suggests a pigment is present at the sealing area by disclosing the radiation absorption is improved by including a substance provided in the sealing area. Dries discloses a carbon black material is incorporated into the polymer film that is to be welded (paragraph 0038, 0043).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MCNALLY whose telephone number is (571)272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel McNally/
Examiner, Art Unit 1791

/John L. Goff/
Primary Examiner, Art Unit 1791

DPM
July 2, 2010